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February 28, 2005

Marlene H. Dortch  
Secretary  
Federal Communications Commission  
445 Twelfth St., S.W.  
Washington, D.C. 20554


**Re: IP-Enabled Services, WC Docket No. 04-36;  
Level 3 Petition for Forbearance, WC Docket No. 03-266**

Dear Ms. Dortch:

On behalf of WilTel Communications, LLC ("WilTel"), Adam Kupetsky of WilTel and my colleague Peter Rohrbach and I made an *ex parte* presentation regarding the proceedings listed above to Scott Bergmann, legal advisor to Commissioner Adelstein. We discussed the points summarized on the attached handouts.

If you have any questions, please contact me.

Respectfully submitted,



David L. Sieradzki  
Counsel for WilTel Communications, LLC

Enclosure

cc: Scott Bergmann

## **WilTel White Paper on Non-Discriminatory Termination Of VoIP-Originated Traffic on the Public Switched Network**

**Summary:** The FCC must act now to ensure non-discriminatory use of the PSTN to terminate VoIP calls. LECs should tariff their rates for PSTN termination service for VoIP, and those rates should be available to every VoIP provider.

- The Commission’s failure to establish clear rules for such PSTN termination is chilling and distorting development of VoIP services.
- \* VoIP providers have no certainty as to one of their largest costs, termination to the PSTN. Many are slowing their rollout of new services because they cannot know their cost structure and do not want to face potentially enormous retroactive liability.

**1. The PSTN Termination Market Power Problem:** VoIP providers need universal termination to every PSTN customer.

- Every LEC (whether an ILEC or CLEC) has market power over VoIP service terminations to its own end user customer base.
- If the LEC chooses to charge a high termination rate, or to discriminate among VoIP providers, it has the market power to do so.
- Negotiation is not a solution in this narrow but critical area. A VoIP provider needs universal termination to each and every LEC. The VoIP provider has no leverage because it cannot tell its customers that it will not terminate to certain LECs.
- Current merger activity dramatically raises the stakes. Two LECs may agree on how they will terminate their VoIP traffic to each other’s PSTN customers. But they have no incentive to give the same terms to other VoIP providers who do not want to be in the local exchange business, or cannot be in that business on a broad scale.

**2. Current Chaos and Discrimination:** Discriminatory treatment of different VoIP providers already is distorting the marketplace for this rapidly growing service.

- Some parties are engaging in “self help.” In other cases, certain ILECs have agreed to give certain preferred CLECs special compensation arrangements for VoIP termination that are unavailable to other VoIP providers.
- Some VoIP providers pay standard access charges, while others pay much lower, “local” reciprocal compensation rates to the same LECs to terminate identical VoIP traffic to the same PSTN end users.
- The rates a VoIP provider pays often depend on what *other* non-VoIP services the entity provides. This makes no sense and violates the Act.

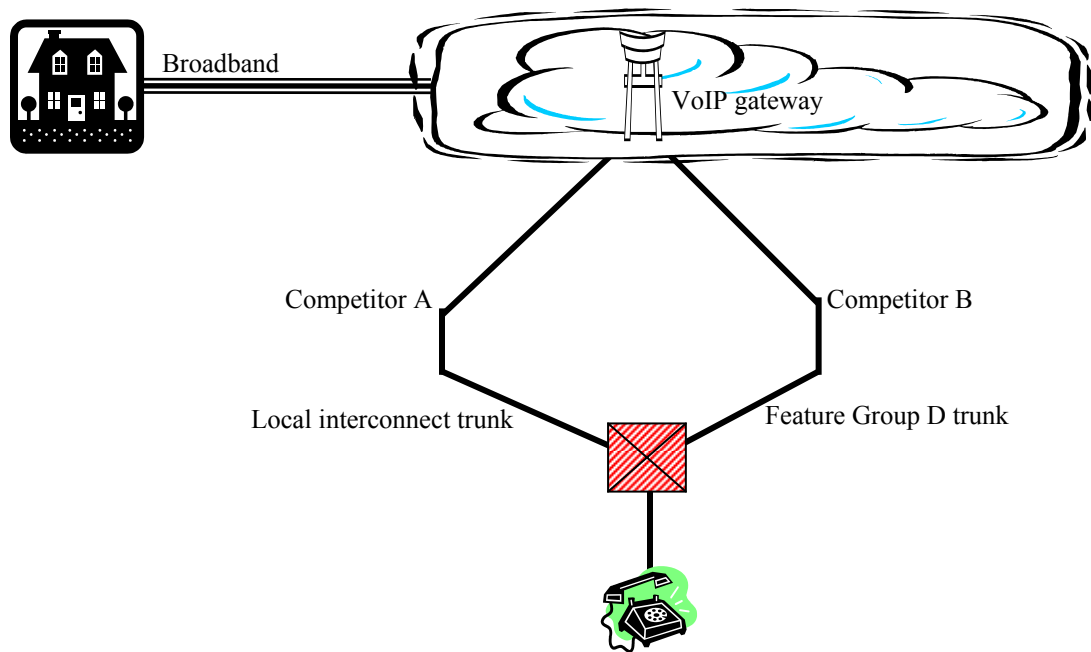
- In particular, VoIP providers must not be forced to enter a separate, unrelated business (e.g., local exchange PSTN services).
- 3. LEC Tariffs for VoIP Termination Service:** The Commission should require all LECs to tariff the rates and material conditions under which they terminate VoIP traffic of others to their PSTN customers.
- LEC non-discrimination rules advance VoIP *without regulation of VoIP itself*.
    - \* This solution applies regardless of whether VoIP service itself is classified as information service or telecommunications.
    - \* By eliminating discrimination in the LEC-provided PSTN termination service, the Commission will free the VoIP market to develop broadly, efficiently, competitively, and without rate regulation.
  - The Commission can establish interim rules for LEC termination of VoIP now, pending further action when *Intercarrier Compensation* reform is completed.
    - \* Option: Use proxy rates. VoIP termination rates could be equal to the LEC’s interstate access charges or best reciprocal compensation rate, or a fixed percentage between.
    - \* Option: Set an interim rate for all LECs. This could be the same as the rate set for termination of ISP-bound traffic. The Commission even could “zero rate” this traffic pending further consideration of bill and keep.
    - \* Different interim rates could apply in rural markets, if desired.
  - Most critical, however, to advance rapid and competitive VoIP deployment, the interim rate level is less important than that LECs charge all VoIP providers the same to terminate VoIP calls to the LECs’ customers.
- 4. Statutory Duty:** The FCC has legal authority -- and an obligation under the Act -- to implement tariffs to ensure non-discriminatory VoIP termination.
- The FCC has held that VoIP traffic falls into a new, unique regulatory category, rather than any of the old categories into which telecommunications services have traditionally been divided, and that such traffic is subject to the FCC’s exclusive jurisdiction.
  - Tariffs in this narrow zone are necessary to address the market power inherent in LEC control over access to their PSTN customers.
  - The Commission has a statutory obligation under the Act to prevent abuse of that market power.
  - LECs’ termination of traffic to end-users on the PSTN is “telecommunications service” (common carriage) (regardless of the classification of the retail VoIP service offering).

**5. Non-Discrimination Principles for VoIP Termination:** The Commission should ensure that a LEC's VoIP termination rate is available to all VoIP providers.

- A VoIP provider should not be required to also become a CLEC and enter into interconnection agreements. Nor should a VoIP provider have to offer non-VoIP long distance services.
- All VoIP providers should be treated the same with regard to the routing of VoIP and non-VoIP service to the LEC for PSTN termination. No discrimination based on delivery over interconnection trunks and Feature Groups.
- All broadband-originated VoIP should pay the same termination rates, whether or not it is carried end-to-end by the same provider.
  - \* The Commission should order VoIP providers, LECs and IXC's to develop signaling protocols to identify broadband VoIP traffic. The use of an SS7 parameter to distinguish VoIP traffic from other types of calls is technically feasible -- industry standards bodies are already working on it.
  - \* Meanwhile, the Commission must mandate interim measures to identify VoIP traffic while signaling protocols are being developed, with auditing/verification procedures.

**6. Relevance to Level 3 Petition: The Need for Tariffs**

- Level 3's forbearance petition, as filed, would approve more favorable treatment to VoIP providers that also provide unrelated CLEC services, as compared with VoIP providers that do not also provide CLEC services.
- WilTel's approach avoids the discriminatory and anti-competitive consequences of relying on interconnection agreements.
- Establishing tariffed termination arrangements for VoIP-PSTN termination would make the Level 3 forbearance petition unnecessary.
  - \* However, if desired the Commission could adopt both the Level 3 forbearance petition and the WilTel solution -- so long as the tariffed rates for terminating VoIP traffic to the PSTN match the most favorable rates available in filed interconnection agreements.





**BROADBAND VoIP TERMINATION TO THE  
PUBLIC SWITCHED NETWORK:  
ADVANCING VoIP THROUGH NON-DISCRIMINATION**

**WilTel Communications, LLC**

**WC Docket Nos. 04-36 and 03-266**

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WilTel Communications, LLC is a leading provider of customized communications solutions to enterprises, carriers, and the federal government. WilTel operates one of the largest, most efficient, and most technologically advanced telecommunications networks in the country, with nearly 30,000 route-miles of fiber across the country. WilTel delivers a comprehensive suite of voice, data, video and IP services over this network, including circuit-switched, packet-switched, and IP-enabled.

WilTel is a major wholesale carrier of VoIP traffic, providing services to many of the most significant VoIP providers in the country. These operations build on WilTel's experience of over 18 years constructing and operating advanced networks for the world's largest carriers.

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# **BROADBAND VoIP TERMINATION TO THE PUBLIC SWITCHED NETWORK: ADVANCING VoIP THROUGH NON-DISCRIMINATION**

**WilTel Communications, LLC  
WC Docket Nos. 04-36 and 03-266**

## **INTRODUCTION AND SUMMARY**

For broadband VoIP to reach its potential, all VoIP providers must be able to terminate calls to the large universe of local telephone customers on a non-discriminatory basis. The vast majority of VoIP calls today are completed over the PSTN. When a VoIP provider knocks on the door of a LEC with a call for that LEC's customer, the LEC must not be allowed to charge different rates depending upon who the VoIP provider is, or what other non-VoIP services it may or may not happen to provide. This white paper explains why LEC tariffs for VoIP termination service are a solution to this serious market problem, and why they will advance unregulated VoIP service itself. <sup>1/</sup>

Unfortunately, the Commission's failure to establish clear rules for LEC termination of VoIP is chilling and distorting development of this crucial technology. VoIP providers have no certainty as to one of their largest costs -- what they owe the LECs for terminating traffic. Pending Commission action, some firms are engaging in self-help, refusing to pay LECs or commingling jurisdictionally-interstate VoIP service with local exchange service. ILECs generally argue that broadband VoIP is the same as non-broadband long distance and that

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<sup>1/</sup> For purposes of this paper, the terms "broadband-originated VoIP" or simply "VoIP" are intended to include the same services that the Commission considered in the *Vonage Preemption Order*: "IP-enabled services having basic characteristics similar to DigitalVoice," including "a requirement for a broadband connection from the user's location; a need for IP-compatible CPE; and a service offering that includes a suite of integrated capabilities and features, able to be invoked sequentially or simultaneously, that allows customers to manage personal communications dynamically . . . ." *Vonage Holdings Corp. Petition for Declaratory Ruling Concerning an Order of the Minnesota Public Utilities Commission*, 19 FCC Rcd 22404, ¶ 32 (2004) ("*Vonage Preemption Order*").

the same access charges should apply. And many firms are waiting for the dust to settle before expanding their VoIP services for fear that they could face substantial retroactive liability.

The Commission must act because LEC-provided PSTN termination service is a critical input to all VoIP service, yet it is not susceptible to marketplace negotiation. Every VoIP provider must be able to deliver traffic to every LEC (and to any and all LECs in the country for that matter). The corollary to this point is crucial: every LEC (whether an ILEC or CLEC) 2/ has market power with regard to such VoIP service terminations to its own end user customer base. If the LEC chooses to charge a high termination rate, or to discriminate among VoIP providers, it has the ability and incentive to do so. A VoIP provider is at the mercy of the LECs because it has no practical ability to tell its customers that it will terminate calls to some LECs but not others. VoIP users expect and deserve the ability to call anyone.

The Commission has a unique opportunity to adopt rational and non-discriminatory rules that will allow the VoIP market to grow. Importantly, nothing discussed here in any way burdens or regulates VoIP offerings or VoIP service providers. The Commission only would be regulating the LECs' price for the PSTN-based termination service that is an essential input to all VoIP. Indeed, by eliminating discrimination in the LEC-provided PSTN termination service, the Commission will free the VoIP market to develop broadly, efficiently, competitively, and without rate regulation. 3/

The Commission already has determined that VoIP falls into its own new regulatory category, neither long distance nor local, and that the service is subject to the FCC's

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2/ See *infra* note 10.

3/ Similarly, nothing discussed here turns on whether or not the Commission defines VoIP service itself as "telecommunications" or "information service." As discussed below, either way the Commission has a duty to prevent LEC discrimination among VoIP providers when they terminate VoIP calls on the PSTN.

exclusive jurisdiction. <sup>4/</sup> The next step is for the Commission to eliminate discrimination in the way that LECs terminate broadband VoIP calls to their respective PSTN customers. The Commission should order all LECs -- including CLECs as well as ILECs -- to tariff the rates and terms under which they provide VoIP termination to the PSTN, so that all VoIP providers pay the same termination rates to a given local carrier.

Ultimately VoIP termination rates should reflect the long-term results of the Commission's recent further notice in the *Intercarrier Compensation* rulemaking. <sup>5/</sup> WilTel strongly supports expeditious action in that critical proceeding. Meanwhile, the Commission at least must prevent unlawful discrimination from infecting the world of VoIP. The Commission should establish interim pricing rules for LEC termination of VoIP.

The FCC has significant flexibility in setting interim VoIP termination rates. For example, one option is to use one of a LEC's "non-VoIP" PSTN termination charges as a proxy. <sup>6/</sup> Thus, LECs could be directed to charge VoIP providers the same as their interstate access charge, or their best reciprocal compensation rate, or an FCC-defined fixed percentage in between. Another option is for the Commission to adopt a specific interim VoIP termination rate, as it did for termination of ISP-bound traffic. The Commission even could "zero rate" this traffic pending further consideration of "bill and keep" for VoIP and/or non-VoIP terminations.

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<sup>4/</sup> Specifically, the Commission held that, in the VoIP context, "calls are not 'local' and 'long distance' in the sense that they are for traditional wireline telephone services." *Vonage Preemption Order*, ¶ 27.

<sup>5/</sup> *Developing a Unified Intercarrier Compensation Regime*, Further Notice of Proposed Rulemaking, CC Docket No. 01-92 (adopted Feb. 10, 2005).

<sup>6/</sup> To emphasize, the LEC would not be charging interstate access charges, or reciprocal compensation, for VoIP-to-PSTN termination -- those are charges applicable to termination of non-VoIP services (long distance and local traffic respectively) to the PSTN. The LEC would be charging a new rate to terminate a new service; the Commission would be using "old world" rates as an interim proxy source in directing what the LEC may charge to terminate the "new world" service of VoIP.

Furthermore, different interim rules could apply to LECs in different types of geographic areas. For example, the Commission might conclude that, for LECs in some parts of the country (*e.g.*, rural study areas), interstate access rates would be the best proxy to use for setting interim VoIP termination rates; for LECs in other areas, the interim VoIP termination rate could be set much lower based on a different proxy methodology. The key point is that the Commission has great flexibility in setting interim rates so long as it prevents discrimination: each LEC must charge all VoIP providers the same rate to terminate VoIP traffic to the LEC's respective PSTN customer base -- whatever that rate may be..

The Commission must act quickly because the development of VoIP faces a large barrier of uncertainty and discrimination. Some providers of broadband-originated VoIP are moving slowly because they cannot know their cost structure and do not want to face potentially enormous retroactive liability. Irrationally, the rates a VoIP provider currently pays may depend upon what *other* non-VoIP services the entity also happens to sell -- those that hand the LEC VoIP traffic together with conventional non-broadband long-distance traffic typically pay access charges; those that hand off identical VoIP traffic together with non-broadband local traffic typically pay reciprocal compensation rates. This makes no sense and, as discussed further below, is unlawful: the rates these competing firms pay to terminate the identical VoIP traffic should not vary based on what other non-VoIP services they may choose to provide.

The Commission must consider these issues as it addresses the pending *Level 3 Forbearance Petition* <sup>7/</sup> in which that company requests forbearance from the access charge rules -- but only for that particular group of VoIP providers who also provide local exchange

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<sup>7/</sup> *Level 3 Communications LLC Petition for Forbearance Under 47 U.S.C. § 160(c) from Enforcement of 47 U.S.C. § 251(g), Rule 51.701(b)(1), and Rule 69.5(b)*, WC Docket No. 03-266 (filed Dec. 23, 2003) ("*Level 3 Forbearance Petition*").

services. The Commission should not grant that *Petition* as filed, for that action would simply give discriminatory advantage to Level 3 and other LECs. <sup>8/</sup> Nor should the Commission just deny the *Petition* without adopting any interim rules, because simply continuing the unacceptable status quo would further deter VoIP rollout through continued chaos and uncertainty in this critical area. Rather, the Commission should act now to ensure the same treatment to all VoIP providers, including those who do not choose to enter the local exchange market. VoIP termination tariffs are one way to achieve that objective.

These issues also are ripe for decision in the pending *IP-Enabled Services* rulemaking. <sup>9/</sup> That docket is considering a large number of important regulatory questions, including the appropriate interconnection policies for IP-Enabled services such as broadband VoIP. Whether or not the Commission is prepared to address all of these matters, it at least must take interim action to ensure that LECs charge all VoIP service providers the same thing when they terminate a broadband-originated call to a PSTN-served end user.

In short, action is needed now. The Commission should establish interim rules for LEC termination of VoIP, and give LECs 30 days to tariff their VoIP termination charges. The interim rules should remain in place pending further action on long-term intercarrier compensation reform. These matters are discussed in further detail below.

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<sup>8/</sup> It also would continue the present uncertainty in important respects. For example, Verizon submits that forbearance in the manner requested by Level 3 would have unanticipated consequences: according to Verizon, “if the Commission were to forbear from applying these rules in the case of interexchange VoIP calls, it would mean the rates that local exchange carriers charge to deliver these calls would no longer be regulated.” Letter from Kathleen Grillo, Verizon, to Marlene Dortch, FCC Secretary, WC Docket No. 03-266 (filed Feb. 11, 2005), attachment at 2.

<sup>9/</sup> *IP-Enabled Services*, Notice of Proposed Rulemaking, 19 FCC Rcd 4863, ¶¶ 61-62 (2004) (“*IP-Enabled NPRM*”).

**I. IMMEDIATE COMMISSION ACTION IS NEEDED TO ENSURE  
NON-DISCRIMINATORY VoIP INTERCONNECTION**

**A. LECs Possess Bottleneck Control Over PSTN Termination for VoIP Services**

VoIP termination to the PSTN has several important characteristics that must be recognized in any evaluation of the VoIP market. Together they make discrimination in PSTN termination a vital competitive issue.

**1. PSTN Termination is an Essential Input to VoIP.**

First, as discussed above, universal termination of calls to all LEC customers is an essential input for a VoIP provider. The Commission is quite familiar with LEC “terminating market power” from other contexts. A LEC’s control over access to its PSTN customer base gives it market power over other service providers who require the ability to communicate with those customers. The Commission has recognized that this monopoly problem persists even where competition can replace regulation of other aspects of telecommunications. Thus, for example, the Commission has established rules and policies limiting the ability of ILECs and CLECs to impose excessive or discriminatory terminating access charges on long distance companies who must deliver traffic to the LECs’ end user customers. <sup>10/</sup>

Unfortunately, VoIP services face exactly the same market dynamic. VoIP providers require interconnection with the PSTN to terminate to ILECs and CLECs in virtually

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<sup>10/</sup> See, e.g., *Access Charge Reform*, First Report and Order, 12 FCC Rcd 15982, ¶¶ 100, 349-357 (1997) (“*Access Charge Reform First Report and Order*”), subsequent history omitted; *Access Charge Reform; Reform of Access Charges Imposed by Competitive Local Exchange Carriers*, Seventh Report and Order, 16 FCC Rcd 9923, ¶ 11 (2001) (“*CLEC Access Charge Reform Order*”). No less than ILECs, CLECs control bottleneck access to the end-users they serve on the PSTN and have the incentive and opportunity to exploit this market power. The Commission recognized in the past that “terminating access may remain a bottleneck controlled by whichever LEC provides terminating access to a particular customer, even if competitors have entered the market,” and concluded that “some action is necessary to prevent CLECs from exploiting the market power in the rates that they tariff for switched access services.” *CLEC Access Charge Reform Order*, ¶¶ 11, 34. Similarly here, CLECs, like ILECs, must be prevented from unilaterally imposing unfavorable or discriminatory termination charges on VoIP providers.

every case, for every call. 11/ This market power extends to VoIP traffic originated internationally. It is sometimes noted that regulation of VoIP service is complicated by the ability of foreign firms to provide the service in the United States from Internet gateways overseas. But even these foreign VoIP providers cannot avoid the LEC bottleneck when they terminate calls to LEC customers in the United States over the PSTN. There is no bypass to terminate to the PSTN end user. Conversely, and importantly, how the Commission deals with the PSTN bottleneck for VoIP here at home will influence how other countries address the same issue when United States VoIP providers need to terminate their customers' international VoIP calls to the PSTN customers of foreign PTTs. 12/

VoIP and other IP-enabled services hold the promise of bringing tremendous benefits to U.S. consumers and spurring increased economic productivity and growth, as the Commission has recognized. 13/ But this objective will be defeated if LECs are able to stand as gatekeepers to their respective PSTN customer bases, and use that market power to discriminate among competing VoIP providers and in favor of themselves.

**2. PSTN Termination Charges Are Potentially the Single Largest Cost of Providing VoIP Depending Upon How the Commission Regulates this LEC Service.**

Second, charges for termination to the PSTN bottleneck are potentially the single largest cost of providing VoIP service. This already is the case for non-broadband long distance

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11/ Pure "broadband to broadband" connections such as those offered by Skype are a miniscule percentage of the broadband VoIP market, and will be so for many years to come.

12/ United States and other VoIP providers will be exposed to potentially large and discriminatory termination charges when they need to terminate calls to PSTN customers in other countries. As the Commission is aware, foreign termination rates have been a major issue in the context of wireline and wireless communications. *See The Effect of Foreign Mobile Termination Rates on U.S. Customers*, Notice of Inquiry, 19 FCC Rcd 21395 (2004). By recognizing and constraining LEC market power in the termination of VoIP traffic, the Commission will set an example for other countries facing the same issue.

13/ *IP-Enabled NPRM*, ¶¶ 4-5.



services that must pay interstate and intrastate access charges. Access charges make up nearly 80% of long distance cost, and in many respects carriers compete on the basis of their ability to minimize access cost. That is why WilTel has been so concerned that the Commission articulate and enforce its access charge rules fairly and consistently. To the extent that certain carriers are allowed to game the system and evade such costs, they enjoy a large competitive advantage and unfairly capture market share from other firms that play by the rules. 14/

The same dynamics apply with respect to PSTN termination for VoIP services. If LECs charge some VoIP providers materially less than others to terminate VoIP calls, they will unlawfully tilt the competitive market through this discrimination. The result would be to chill new entry and growth in the VoIP market across the board. 15/

### **3. VoIP Providers Have No Leverage to Negotiate PSTN Termination.**

Third, while all VoIP providers need to terminate calls to all LEC customers, LECs do not need anything from VoIP providers, especially VoIP providers who are not also LECs. This underscores the market power of the LECs, and demonstrates why the rates they charge for PSTN termination cannot be ignored by the FCC. Certain LECs may need access to other LECs who also may happen to offer VoIP service in addition to local exchange service. Even there the bargaining leverage is uneven depending on the number and type of PSTN customers each LEC serves (its bottleneck customer base), and the amount of traffic to be exchanged. But more important, VoIP providers who do not want to enter the local exchange

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14/ See Letter from Blaine Gilles, Senior Vice-President, Voice Services and Strategic Markets, WilTel Communications, LLC, to Chairman Michael K. Powell, WC Docket No. 03-133 (filed Aug. 27, 2004).

15/ “I’ve been afraid to deploy connected IP-PSTN services because I’m afraid of the potential access charge bill.” Presentation by Jeff Pulver, CEO, pulver.com, to NARUC Telecommunications Committee, Washington, D.C. (Feb. 14, 2005) (available at <http://pulver.com/reports/images/pulver@naruc05.ppt>), at 29.

market do not even have that basis for negotiation. They require PSTN termination for VoIP, and have nothing to trade for that service.

No firm should feel obliged to become a CLEC, and enter into a local exchange interconnection agreement, in order to compete in the interstate VoIP market. <sup>16/</sup> This is wrong as a matter of both law and economics: the Commission should not force a broadband company also to be a LEC. And to state the obvious, even a VoIP provider who chooses to offer local service in one market still would have no leverage when seeking to terminate its VoIP service to the PSTN in every other local market.

Given these three factors, it is absolutely critical that the Commission enforce the Communications Act's mandate for non-discrimination by ensuring that LECs treat all VoIP providers the same for purposes of terminating to PSTN customers.

**B. Growing LEC Discrimination Is Distorting the VoIP Marketplace.**

Unfortunately, today *de facto* discrimination is running rampant in the VoIP context, and threatens to introduce substantial economic distortions into the marketplace for this rapidly growing service. In the absence of clear FCC guidance, companies that offer VoIP services (and parties that interconnect with such companies) are engaging in "self help" measures that result in different companies receiving vastly different treatment when they interconnect VoIP traffic to the PSTN. VoIP providers (and parties that transmit VoIP traffic on their behalf) may experience different rates, terms, and conditions depending on what other non-VoIP services they may provide in addition to VoIP -- information services, competitive local exchange or exchange access services, or long-distance. Moreover, certain ILECs have entered into unique local interconnection deals giving certain preferred CLECs special compensation

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<sup>16/</sup> Such VoIP providers could not even enter into a local interconnection agreement and obtain local interconnect trunks without having local traffic to trade.

arrangements for VoIP termination that are unavailable to other VoIP providers. <sup>17/</sup> These arrangements are in many respects private deals to arbitrage the risk of uncertainty created by the Commission's failure to clearly articulate VoIP termination rules to date.

The discrimination risk grows exponentially when one considers the recently announced acquisitions of AT&T and MCI by the two largest RBOCs. SBC and Verizon, collectively, already control over 55% of the wireline PSTN end user lines in the country (and over 66% of the ILEC end user lines). <sup>18/</sup> If these companies' acquisitions were approved, there would be a substantially greater risk that these two giant LECs would negotiate mutually advantageous VoIP termination for each other, and then charge higher rates to every other VoIP competitor. The practical result could be that those two RBOCs would dominate the VoIP market of the future.

VoIP consumers suffer the cost of discrimination, both in higher prices and through less choice and innovation. The Commission has made clear its commitment to VoIP: it "cannot, and will not, risk eliminating or hampering this innovative advanced service that facilitates additional consumer choice, spurs technological development and growth of broadband infrastructure, and promotes continued development and use of the Internet." <sup>19/</sup> Yet PSTN termination discrimination puts all of these goals at serious risk.

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<sup>17/</sup> "Level 3 has reached voluntary interconnection agreements with two RBOCs, BellSouth and Verizon, which permit the use of multijurisdictional trunks, with safeguards including audit rights." *Ex parte* letter from John T. Nakahata, Counsel to Level 3, to Marlene Dortch, Secretary, WC Docket No. 03-266 (filed Jan. 31, 2005) ("*Level 3 Jan. 31 Letter*"), at 2. By contrast, WilTel has not been able to negotiate (or opt into) similar arrangements with respect to the broadband IP-originated traffic that it seeks to transmit to end users on the ILEC networks.

<sup>18/</sup> These figures are based on data reported as of year-end 2003 (but exclude Verizon-Hawaii). *See* FCC, "Local Telephone Competition: Status as of June 30, 2004," at Table 1 (rel. Dec. 22, 2004); FCC, "Statistics of Communications Common Carriers, 2003/2004 Edition," at Table 2.9 (rel. Oct. 12, 2004).

<sup>19/</sup> *Vonage Preemption Order*, ¶ 37.

**C. Discrimination in VoIP Interconnection Arrangements Violates the Communications Act.**

The existing unreasonable discrimination, in which different providers pay different rates to terminate identical VoIP traffic to the PSTN, violates the Communications Act of 1934, as amended (“Act”). Section 202(a) of the Act prohibits carriers from imposing any unjust and unreasonable discrimination, undue preferences, or undue or unreasonable disadvantages, with respect to prices, terms and conditions for interstate “communication service.” Regardless of whether retail VoIP service itself is ultimately classified as “telecommunications” or an “information service,” it is clear that the ILEC- or CLEC-provided service of terminating VoIP traffic over the PSTN falls within the definition of “wire communications” as defined in the original Communications Act of 1934 (“1934 Act”). 20/ Moreover, to the extent that, as some parties argue, VoIP traffic interconnected with the PSTN is subject to Section 251(b)(5) of the Act, 21/ the Commission has made it clear that the non-discrimination requirements of the 1996 Act provisions (including Sections 251 and 252) are, if anything, even more stringent than those of the 1934 Act. 22/

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20/ The Act defines “communications by wire” as including not only transmission but also “all instrumentalities, facilities, apparatus, and services (among other things, the receipt, forwarding, and delivery of communications) incidental to such transmission.” 47 U.S.C. § 153(52). Interconnection functionality clearly falls within the definition of “communications by wire.” *Cf. Expanded Interconnection with Local Telephone Company Facilities*, 7 FCC Rcd 7369, ¶ 162 & notes 364-66(1992), *rev’d on other grounds sub nom. Bell Atlantic Tel. Cos. v. FCC*, 24 F.3d 1441 (D.C. Cir. 1994).

Note that the fact that VoIP-PSTN interconnection is a form of “communications by wire” does not necessarily mean that it must be subject to conventional interstate switched access charges pursuant to Part 69 of the Commission’s rules. Those rules apply only to “interexchange carriers that use local exchange switching facilities for the provision of interstate or foreign telecommunications services.” 47 C.F.R. § 69.5(b). VoIP traffic does not fall within the “long distance” or “interexchange” category. *Vonage Preemption Order*, ¶ 27.

21/ See, e.g., Letter from John T. Nakahata, Counsel for Level 3, to Marlene Dortch, WC Docket No. 03-266 (filed Jan. 24, 2005), at 1-3. WilTel does not necessarily agree with this legal argument.

22/ *Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*, 11 FCC Rcd 15489, ¶ 859 (1996) (“*Local Competition Order*”), *subsequent history omitted*.

Unlawful discrimination exists when a carrier provides the same service at different rates to similarly situated parties, where there is no cost or other difference that justifies the rate differential. <sup>23/</sup> Such discrimination is clearly occurring here: LECs do not incur any different costs when they terminate VoIP traffic from different VoIP providers. The LECs' costs of terminating VoIP traffic do not vary based on what other non-VoIP categories of traffic are handed off by a provider. Yet pending Commission action, the rates LEC charge today may vary tremendously. The Commission has the obligation to take action to put an end to this unlawful discrimination imposed by carriers with bottleneck market power.

## **II. THE COMMISSION SHOULD ADOPT BASIC NON-DISCRIMINATION PRINCIPLES FOR VoIP TERMINATION.**

Three overarching principles should govern the Commission's enforcement of non-discriminatory VoIP termination to the PSTN. These principles should be applied to end current de facto discrimination, and to prevent abuse of the LEC bottleneck in the future.

### **A. All VoIP Providers Should Pay the Same PSTN Termination Rates, Regardless of What Other Non-VoIP Services They May (Or May Not) Also Terminate Over the PSTN.**

First and foremost, the Commission must establish that all providers who transmit VoIP-originated traffic for termination on the PSTN will pay the same rates. It is bad enough that today different rates apply to the termination of *different non-VoIP* services: local, interstate long-distance, and intrastate long-distance. The Commission absolutely needs to work towards expeditiously eliminating the distinctions among these services with regard to intercarrier compensation. But it is even worse when different VoIP service providers pay vastly different amounts for terminating *identical VoIP* traffic. The Commission must not allow the inefficient

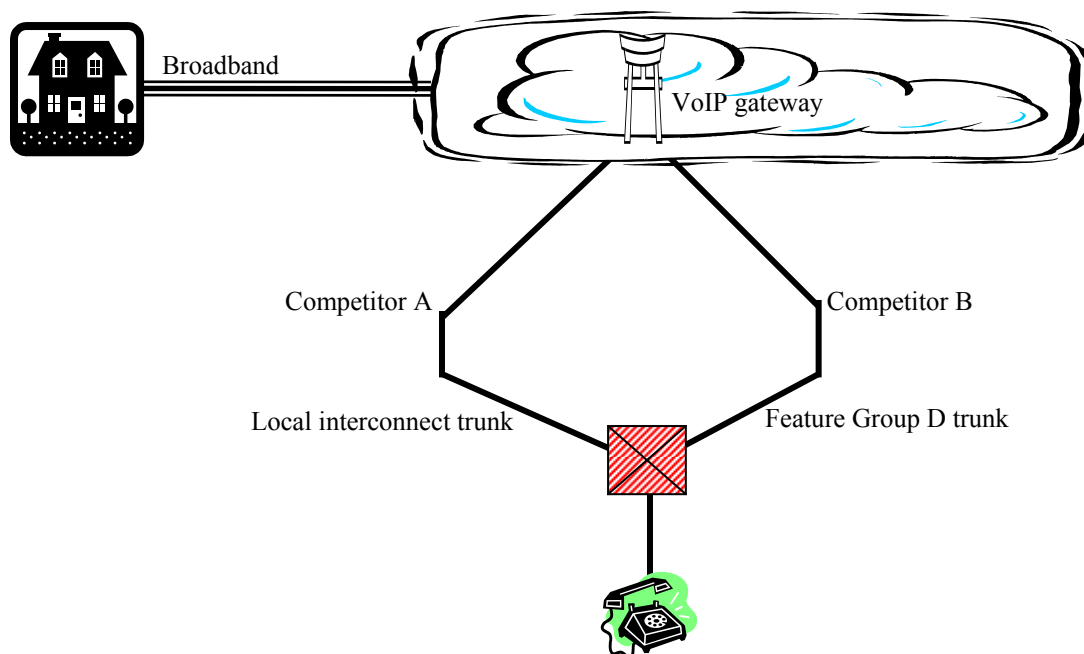
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<sup>23/</sup> See, e.g., *American Trucking Associations v. FCC*, 377 F.2d 121 (D.C. Cir. 1966).

and discriminatory arbitrage opportunities inherent in the current non-VoIP telecommunications world -- the challenging vestige of historical and legal distinctions -- to infect and pollute broadband VoIP competition.

In particular, as discussed above, the Act prohibits discrimination that is based on what other non-VoIP services the VoIP provider also may terminate over the PSTN. That result would unlawfully force a VoIP company to enter other markets, and offer other services, simply to get the benefit of a different rate for a LEC termination service that costs the same.

The graphic below illustrates this point. End users may originate VoIP traffic over broadband connections linked, via the Internet, to a VoIP operator's gateway or soft-switch. That operator may have contracts to terminate the VoIP traffic to the PSTN via two different providers: one may, in addition to carrying VoIP traffic, also carry substantial amounts of long-distance traffic; the other may, in addition to carrying VoIP traffic, also provide local exchange services and carry substantial local "transport and termination" traffic. There is absolutely no justification for the LEC to impose different VoIP termination rates on these two entities, which carry precisely the same traffic from the same VoIP gateway to the same end user served over the same PSTN.



A VoIP provider should not pay lower rates to terminate VoIP traffic because it also is in the non-VoIP long distance business, or the non-VoIP local exchange business (including CLEC dial-up ISP carriers). If a VoIP provider separately is or wants to be in one of those non-VoIP markets, that is the firm's right. But that decision must not be a condition of receiving more favorable PSTN termination rates from the LEC for VoIP traffic.

Any different result would formalize current VoIP termination discrimination and effectively impose a barrier to entry in the VoIP marketplace. CLECs should not have to enter the non-VoIP long distance market to terminate VoIP at a favorable rate. IXC's should not have to enter the local market to obtain better VoIP termination rates. Such restrictions have long been held to be unlawful barriers to entry. 24/

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24/ See, e.g., *New England Public Communications Council Petition for Preemption Pursuant to Section 253*, 11 FCC Rcd 19713, ¶ 20 (1996) (Section 253 preempts Connecticut rule precluding anyone but ILECs or CLECs from providing payphone service, in part because "requiring payphone providers to provide local exchange services in order to be eligible to offer payphone services significantly hinders such providers relative to incumbent LECs and certified [competitive] LECs."), *recon. denied*, 12 FCC Rcd 5215 (1997). See also *Public Utility Commission of Texas, et al., Petitions for Declaratory Ruling and/or Preemption of Certain Provisions of the Texas Public Utility Regulatory Act of 1995*, 13 FCC Rcd 3460 (1997) (Section 253 preempts Texas rule precluding the three largest IXC's, but not other entities, from providing competitive local service), *aff'd on other grounds*, *City of Abilene v. FCC*, 164 F.3d 49 (D.C. Cir. 1999).

Nor is it true that companies can simply enter CLEC markets or “become CLECs” in order to qualify for favorable interconnection offerings such as those proposed in the *Level 3 Forbearance Petition*. Of course, it is fantasy to expect a VoIP provider to become a CLEC across the country anyway. Even in a single market, local exchange entry would be costly, time-consuming, and difficult for many companies -- as well as irrelevant to their fundamental business plans. For example, companies would have to obtain CLEC certificates of public convenience and necessity, and would have to establish “local interconnect” arrangements that are time-consuming and difficult and could substantially interfere with a company’s operating efficiencies. 25/

And even then, the VoIP provider’s leverage with the LEC bottleneck would depend on the VoIP company having substantial traffic to exchange with that LEC. This is not the way the VoIP world works. To state the obvious, a VoIP provider terminating small amounts of broadband voice to PSTN customers nationwide will predictably have very small amounts of traffic to hand off to hundreds of LECs. This is the precise opposite situation of a local CLEC, who at least can have aspirations to win substantial volumes of traffic to exchange with one ILEC.

In short, a VoIP provider should not face less favorable PSTN termination rates than its competitors based on its decision not to enter non-VoIP markets, whether local exchange or any other line of business. Any other result would violate the Act.

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25/ Furthermore, now that broadband VoIP-originated traffic has been held to be jurisdictionally *interstate*, it should make no difference whether a particular entity has received certification from a *state* commission as a “CLEC,” an “IXC,” or not at all. Long ago, the FCC wisely eliminated all forms of certification requirements prior to permitting non-dominant carriers to enter interstate communications markets. *Policy and Rules Concerning Rates for Competitive Common Carrier Services and Facilities Authorizations Therefor*, First Report and Order, 85 FCC 2d 1 (1980), *subsequent history omitted*.



**B. All VoIP Providers Should Be Treated The Same With Regard to Routing VoIP and Non-VoIP Traffic Over the Same Facilities**

As a closely related matter, the Commission should make it clear that discrimination will not be tolerated based on distinctions without a difference relating to trunking arrangements. Some ILECs require that all VoIP traffic must terminate over separate trunks from non-VoIP traffic, a requirement that, in many cases, is inefficient and unnecessary given the substantial interconnection arrangements already in place. Although WiTel believes that LECs should not be allowed to impose inefficient solutions on VoIP providers, the more important point is that ILEC interconnection requirements should not (and may not under the Act's non discrimination mandate) favor one firm over another based on how it hands off this new jurisdictionally-interstate VoIP traffic. To the extent that the Commission allows VoIP traffic to be delivered to the LEC over the same facilities as non-VoIP traffic, that same policy should apply to any facilities connecting with the PSTN.

Furthermore, even if the Commission does not condition lower VoIP termination rates on participation in a non-VoIP market, the Commission effectively would allow such discrimination in practice if it allowed some VoIP providers but not others to commingle VoIP and non-VoIP traffic. For example, Feature Group D trunks (used by IXC's) are physically indistinguishable from the local interconnection trunks used by CLECs. Both are digital channels, typically at the DS1 level or above, that connect to the trunk side of an ILEC's tandem or local switch. The only difference relates to ordering and billing procedures and protocols. Feature Group D trunks are ordered out of ILEC's interstate (or intrastate) access tariffs pursuant to Sections 201-205 of the Act, and the trunks and the traffic traversing them are priced accordingly. Local interconnect trunks are ordered under the terms of local interconnection agreements pursuant to Sections 251-252 of the Act; the trunks are subject to the

“interconnection” rules of Section 251(c)(2) and 252(d)(1), while the local minutes traversing them are subject to the “reciprocal compensation” (or “transport and termination”) rules of Sections 251(b)(5) and 252(d)(2). But once again, aside from the legal and procedural differences, the physical trunks are identical, and they may carry the same VoIP-originated traffic from the same VoIP gateway, to the same PSTN interconnection point.

Unfortunately, the current interconnection regime provides for different termination rates for different non-VoIP services. This inefficient if not unlawful system must be fixed in the *Intercarrier Compensation* rulemaking. Meanwhile, however, the Commission must not allow the problem to be thrust into the world of VoIP.

Specifically, the Commission should establish a principle of no discrimination based on trunking arrangements. This principle has three interrelated corollaries.

- First, VoIP providers should not be forced to set up new, separate “VoIP” trunk groups to connect to the PSTN at “VoIP interconnection” rates. Companies that already have existing network arrangements to terminate traffic to the LEC should not be forced into costly and inefficient network rearrangements when they terminate VoIP to the PSTN. Thus, CLECs should not be forced to set up Feature Group D arrangements when they terminate broadband VoIP-originated traffic to the PSTN. By the same token, IXC's should not be forced to establish separate local interconnection trunks when they transmit broadband VoIP-originated traffic. These firms should be able to terminate VoIP calls at the same rates over existing their existing facilities.
- Second, no favoritism in trunking arrangements should be allowed. VoIP services should be eligible for hand-off to the LEC PSTN over both Feature Group D trunks and local interconnection trunks -- or neither.
- Third, commingling policies should be competitively neutral. For example, to the extent a company may “commingle” VoIP with local traffic over local interconnect trunks, then other companies must be allowed to “commingle” VoIP with long-distance traffic over Feature Group D access trunks – in both cases, subject to appropriate verification measures. If an ILEC (or CLEC) does not permit combining of VoIP traffic with other forms of traffic on the same circuit, then it must, at a minimum, permit VoIP circuits to be “ratcheted” with access or local interconnect trunks, subject to comparable procedures.

Any processes for separating out different types of interconnected traffic must be applied in a competitively neutral manner. 26/

So long as any broadband VoIP service is terminated over the same facilities as non-VoIP local or long distance, it will be necessary to identify the respective traffic for PSTN termination rating purposes. This is a familiar issue that exists today. As discussed below in Section IV of this memorandum, signaling parameters can be developed to facilitate separate identification of specific calls as being “VoIP originated.” In the meantime, verification and audit processes can suffice for this purpose.

**C. End-to-End Principles Should Apply: All VoIP Traffic Originated by A Broadband End User Should Be Terminated to the PSTN on the Same Basis**

The Commission should also reaffirm, as a general principle, that the same PSTN termination treatment should apply regardless of whether VoIP is provided by a single entity end-to-end, or whether multiple providers are involved. The key factor is whether the VoIP call originated over broadband. If so, then the call should be eligible for the VoIP termination rate.

This principle is consistent with the “end-to-end” analysis the Commission already has applied when evaluating VoIP issues. Thus, wholesale providers who transmit VoIP traffic on behalf of others must be treated the same as retail VoIP providers, and the same interconnection arrangements must be available. 27/ If a call is originated by a broadband VoIP customer, and terminates on the PSTN, then the same non-discriminatory interconnection arrangements should apply whether or not the VoIP call is carried by only one service provider

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26/ Similarly, reasonable ILEC networking requirements (e.g., direct end-office trunking, trunk efficiency rules, etc.) should be acceptable provided that they are applied even-handedly and in a cost-based manner.

27/ *Petition for Declaratory Ruling that AT&T’s Phone-to-Phone IP Telephony Services Are Exempt from Access Charges*, 19 FCC Rcd 7457, ¶ 19 (2004) (“*IP-in-the-Middle Order*”) (“Our analysis in this order applies to services that meet these criteria regardless of whether only one interexchange carrier uses IP transport or instead multiple service providers are involved in providing IP transport.”).

or more than one. The number or identities of intermediate parties that transmit such traffic should not make any difference to the non-discrimination analysis.

### **III. THE COMMISSION SHOULD REQUIRE LECs TO TARIFF PSTN TERMINATING SERVICE FOR VoIP.**

LEC PSTN termination tariffs for VoIP provide the most straightforward way to implement the principles discussed above. Through tariffing rules the Commission can satisfy the non-discrimination requirements of the Act and ensure that all local exchange carriers – both ILECs and CLECs – do not exploit their bottleneck market power over VoIP termination. As discussed in greater detail below, tariffs offer a number of benefits; can be used to establish reasonable and non-discriminatory rate levels; and are clearly within the Commission’s authority to require.

Again, to avoid any confusion, these tariffs would not apply to the VoIP service itself. VoIP offerings would not be regulated at all under this approach. However, by regulating the LECs’ PSTN termination service for VoIP -- just as the Commission already regulates the LECs’ provision of PSTN termination for non-VoIP interstate services -- the Commission will allow eliminate unlawful discrimination in this essential input required by all VoIP providers. In doing so, the Commission will set the foundation for a vigorously competitive and expanding VoIP market.

#### **A. The Need for VoIP Termination Tariffs.**

Tariffs offer a number of public policy benefits. First, they are administratively straightforward and relatively easy to implement. The LECs have decades of experience with establishing tariffs; the Commission and competitive carriers have comparably extensive experience with reviewing them. Tariffs can be filed and placed into effect quickly, and the

Commission has clear authority to review them and, if necessary, order modifications. Moreover, filed interstate tariffs can be made available on the web sites of the Commission and/or the LEC, and therefore are a highly transparent mechanism, helping to ensure non-discrimination.

Second, services offered under FCC tariffs are equally available to all parties, regardless of their regulatory status as carriers or end-users. Indeed, the FCC has long held that common carriers are prohibited from discriminating between carriers and end users with respect to services offered pursuant to interstate tariffs. <sup>28/</sup> This sets tariffs apart from interconnection agreements, which by statute are available only to “requesting carriers,” not end-users. <sup>29/</sup> Given that both carriers and non-common carriers may provide VoIP services <sup>30/</sup> and need to terminate their traffic over LEC networks to PSTN end-users, it makes particular sense to implement a non-discriminatory interconnection policy using tariffs that are neutral as between carriers and non-carriers.

Third, tariffs respond directly to the particular market problem in the VoIP world presented by the LECs’ control of terminations to their respective customer bases. They ensure non-discriminatory treatment wherever in the country (or the world) the VoIP call originates. In contrast, for example, interconnection agreements were designed to address a very different market situation: the exchange of traffic between two local carriers who each require access to each others network and customer base. One can debate how well interconnection agreements work in this context; the Commission is familiar enough with the problems and issues that have

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<sup>28/</sup> See, e.g., *Regulatory Policies Concerning Resale and Shared Use of Common Carrier Domestic Public Switched Network Services*, 83 FCC 2d 167 (1980); *Petition of First Data Resources, Inc., Regarding the Availability of Feature Group B Access Service to End Users*, Memorandum Opinion and Order, 1986 WL 291786, ¶13 (Com. Car. Bur., rel. May 28, 1986).

<sup>29/</sup> See generally 47 U.S.C. §§ 251-252.

<sup>30/</sup> As noted above, WiTel takes no position here regarding whether VoIP services should be classified as “information services” or “telecommunications.”

arisen based on the differing bargaining power of LECs and CLECs. But the point here is that interconnection agreements have no role at all in an environment where the VoIP provider requires a termination service from the LEC, but has nothing that the LEC needs from it. In this narrow but critically important area, tariffs are absolutely necessary to enforce the Communications Act's non-discrimination requirements and facilitate the rapid deployment of competitive broadband VoIP services.

Fourth, tariffs prevent discrimination on the basis of what other services a VoIP provider offers. As discussed above, it is unacceptable to require a VoIP provider to become a CLEC, which is required in order to terminate traffic under an interconnection agreement. Conversely, a tariff would not require a CLEC/VoIP provider to become a long distance provider and therefore change the way it does business. Indeed, CLECs currently have to abide by ILEC tariffs to the extent they exchange non-local traffic.

Interconnection agreements still could be relevant in the Commission's determination of the methodology for establishing VoIP termination rates, for the rates a LEC accepts to terminate local exchange traffic could be used as a reasonable proxy for the rate at which it should be required to terminate VoIP traffic. However, this is not the only pricing option available to the Commission. This and related rate methodology questions are discussed in the next section of this paper.

**B. Interim VoIP Termination Rates While the Intercarrier Compensation Rulemaking is Pending**

As discussed above, the Commission cannot delay addressing the VoIP termination problem. The most critical task for the Commission is to ensure that all VoIP providers pay termination rates that are *the same* -- the levels of those rates are a secondary concern.

Given that the *Intercarrier Compensation* rulemaking has a long way to go before it concludes, it necessarily follows that the Commission must establish VoIP termination rules on an interim basis. WilTel does not underestimate the competing pressures to make those rates high (as some ILECs argue) or low (as some VoIP providers have requested). However, for now we are agnostic on the proper rate level for VoIP-PSTN termination. The Commission's most pressing task is to make a decision -- any decision -- so that the VoIP market can plan accordingly and providers can expand their services on equal footings and without the overhang of legal uncertainty.

There are a number of options for setting an interim rate level for VoIP termination. Importantly, the Commission does not need to use the same methodology for all LECs. It may, for example, conclude that different interim rates are appropriate in rural LEC exchanges than in more urban ones.

One possible approach is to look to other LEC termination rates applicable to non-VoIP services, and use one of them as a proxy here for VoIP. For example, the ILECs' standard interstate switched access rates could be applied. While those rates remain high, they contain less implicit subsidy funding than in the past -- and are substantially lower than intrastate switched access rates in many states. Applying interstate switched access rates to terminating VoIP traffic arguably would be consistent with the Commission's conclusion in the *Vonage Preemption Order* that broadband VoIP service is to be treated as jurisdictionally interstate, and would minimize the possibility of discrimination between VoIP and other types of traffic. 31/

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31/ Use of interstate switched access rates would also facilitate implementation of the principle that the same treatment is required "regardless of whether only one interexchange carrier uses IP transport or instead multiple service providers are involved in providing IP transport." *IP-in-the-Middle Order*, ¶ 19.

An alternative approach would be to use local reciprocal compensation rates as the proxy for tariffed VoIP interconnection rates. Local transport and termination rates are more likely to be cost-based than access charges, and this appears to be the current, *de facto* method of determining the amounts that many VoIP providers pay for traffic termination on the PSTN. Moreover, the process of negotiations among local exchange carriers, while not perfect, helps to ensure the reasonableness of these rate levels in the local reciprocal compensation context. <sup>32/</sup> While the same balance of negotiating leverage does not exist in the context of VoIP interconnection (since the traffic is one-way: from the VoIP provider to the local exchange carrier), these rate levels can be borrowed as a proxy for reasonable VoIP termination rates. Finally, insofar as some VoIP providers and traffic transmitters currently terminate VoIP under local interconnection agreements, albeit on a disputed basis, selecting a rate from one of these arrangements as the proxy for tariffed VoIP termination rates would help remedy discrimination.

However, if a local reciprocal compensation rate is used as the basis for tariffed VoIP termination prices, the next question is *which* rate? Typically ILECs have negotiated interconnection agreements with numerous CLECs in each state, and different CLECs at different times may have agreed to different rate levels. WilTel submits that each ILEC's

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<sup>32/</sup> Some ILECs may argue that setting a VoIP termination rate below access charge rate levels might not fully compensate them for their services. However, some carriers have agreed to VoIP termination rates as low as \$.00045 pending FCC action on the Level 3 Forbearance Petition. *See Joint Application of Verizon New York, Inc. and Level 3 Communications, LLC, for Approval of Amendment to an Interconnection Agreement Pursuant to Section 252 of the Communications Act of 1996*, Case 01-C-0148 (N.Y. PSC, rel. Jan. 28, 2005) (available at [http://www3.dps.state.ny.us/pscweb/WebFileRoom.nsf/0/D568C587E676CEF285256F960054ACDF/\\$File/01c0148.01.28.05.pdf?OpenElement](http://www3.dps.state.ny.us/pscweb/WebFileRoom.nsf/0/D568C587E676CEF285256F960054ACDF/$File/01c0148.01.28.05.pdf?OpenElement)) (approving Verizon/Level 3 agreement but directing Verizon to show cause why it should not be required to provide the same terms to WilTel). Most of the large ILECs have already taken advantage of the Commission's rule that entitles them to a \$0.0007 per minute rate for ISP-bound traffic, so long as all reciprocal compensation traffic is exchanged at the same rate. *See Implementation of the Local Competition Provisions in the Telecommunications Act of 1996; Intercarrier Compensation for ISP-Bound Traffic*, Order on Remand and Report and Order, 16 FCC Rcd 9151, ¶ 8 (2001), *rev'd in part sub nom. WorldCom, Inc. v. FCC*, 288 F.3d 429 (D.C. Cir. 2002). These carriers arguably have implicitly accepted that \$0.0007 per minute is a reasonably compensatory rate.



tariffed VoIP termination rates should be equal to the lowest local exchange termination rate that the ILEC makes available in an approved, effective interconnection agreement in each state. If this approach were adopted, VoIP-PSTN termination tariffs may have to be changed over time to match local reciprocal compensation rates as new agreements are approved and placed into effect.

Alternatively, the Commission could derive the VoIP termination rate through a different methodology. For example, one possible proxy rate level would be \$0.0007 per minute, which the Commission established as the maximum for ISP-bound traffic. 33/ Or the Commission could establish a separate rate based on some compromise between these various proxies, such as a fixed percentage of the difference between the LECs' reciprocal compensation and access rates. The Commission might even "zero rate" VoIP termination traffic pending further consideration of bill and keep. There is logic to requiring LECs to include the cost of VoIP termination service in the flat rates they charge their end users, to reflect the interest of those customers in being able to receive broadband VoIP calls originated anywhere in the world.

Again, an important advantage of the tariff framework proposed here is its flexibility. The Commission can establish different rules, resulting in different VoIP termination rates, for LECs in different areas. For example, Level 3 has not sought forbearance from the access rules for VoIP in rural LEC territories. 34/ Level 3's overall approach in its Petition is off the mark; neither access nor local interconnection rates should apply directly to termination of the entirely new and distinct service of VoIP. A new termination rate for VoIP is necessary that is available to all.

But at the same time, if the Commission wishes it can reach substantially the same result by allowing rural LECs to set their VoIP termination rates using their interstate

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33/ *Id.*

34/ See Level 3 Petition for Forbearance, WC Docket No. 03-266 (filed Dec. 23, 2003) at 2.

access rates as the proxy. This does not preclude the FCC from requiring non-rural LECs to use a different proxy to set their VoIP termination rates well below their access rates (whether based on one of their reciprocal compensation rates, the ISP-bound traffic rate, or some other methodology). Again, WilTel is less concerned with the interim rate level per se, and more with whether each LEC charges all VoIP providers the same rates to complete broadband calls to its end user called parties.

CLECs also should be required to tariff a termination rate for VoIP terminated traffic, in this case one that is no higher than the tariffed rate of the ILEC in the same geographic area. This approach is consistent with the existing rule governing CLECs' tariffed per-minute access rates for termination of non-VoIP long distance. 35/ As the Commission recognized in the *CLEC Access Charge Order*, CLECs have the same market power as ILECs over terminating traffic to individual end-users subtending their networks; a rate cap is necessary to prevent abuses.

The Commission has authority, under Sections 201-205, to prescribe reasonable rates (or a methodology by which to establish reasonable rates) for the interstate service of terminating VoIP-originated traffic. So long as the approach selected is not arbitrary or capricious, and so long as it does not preclude the local telephone companies from an opportunity to earn a reasonable return on their investment, the Commission has a great deal of latitude in determining the reasonable rate level. 36/

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35/ 47 C.F.R. § 61.26.

36/ See, e.g., *FPC v. Hope Natural Gas Co.*, 320 U.S. 591 (1944); *Duquesne Light Co. v. Barasch*, 488 U.S. 299 (1989); *Verizon Communications, Inc. v. FCC*, 535 U.S. 467, 497-501 (2002). The Commission's broad authority to establish rates on an interim basis is particularly strong. See, e.g., *Competitive Telecommunications Association v. FCC*, 117 F.3d 1068 (8<sup>th</sup> Cir. 1997).

Finally, the Commission must make it clear that, pursuant to the Filed Rate Doctrine, 37/ the only rates, terms, and conditions that may lawfully apply for termination of VoIP traffic are those in the filed tariffs -- not rates, terms, and conditions that may be contained in “private” contracts or local interconnection agreements. Companies should not be permitted to use leverage in some other market segment (*e.g.*, ISP-bound intercarrier compensation) to extract special concessions in another area (*e.g.*, VoIP termination) that are not universally available.

In that regard, it should be noted that the SBC operating companies have already filed an interstate tariff governing termination of VoIP traffic to the PSTN -- the so-called “True IP-To-PSTN” or “TIPToP” tariff filed on November 24, 2004. 38/ While WilTel welcomes this tariff-based model for defining VoIP-to-PSTN termination arrangements, WilTel does not agree with all the provisions of SBC’s TIPToP tariff. For example, SBC states that “TIPToP service is not a mandatory offering” and that “[VoIP] providers who choose not to purchase TIPToP service may use other services, to the extent permitted by SWBT’s tariffs and prevailing law, to connect traffic from their IP end users to end users of the PSTN via the Telephone Company’s existing network.” 39/ SBC’s approach, however, appears to violate the non-discrimination requirements of the Act. Given the market power of a LEC over termination to its PSTN customer base, the tariffed service must be the exclusive mechanism for all VoIP providers to terminate VoIP traffic, and the rates provided in the tariff should be the only lawful

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37/ See, *e.g.*, *American Telephone and Telegraph Co. v. Central Office Telephone, Inc.*, 524 U.S. 214 (1998).

38/ See, *e.g.*, Southwestern Bell Telephone Co. Tariff FCC No. 73, Transmittal No. 3019 (filed Nov. 24, 2004, effective Nov. 25, 2004).

39/ *Id.*, Description and Justification, at 1. In addition, WilTel is concerned that the tariff requires use of separate VoIP trunks and prohibits the use of a VoIP provider’s own infrastructure to access the termination services.

rates for such traffic. This is necessary to prevent LECs from unlawfully charging interstate (and possibly even *intrastate*) access rates to some carriers, tariffed VoIP termination rates to others, and local exchange rates to still other entities that route broadband VoIP-originated calls over local interconnection trunks.

**C. The Commission Has Legal Authority to Mandate VoIP Termination Tariffs.**

The Commission has authority to mandate tariffing of any interstate common carrier communications service. In this case, because VoIP termination is (1) interstate, (2) communications, and (3) a common carrier service, the FCC can and should subject it to tariffing.

1. Broadband VoIP is Interstate. In the *Vonage Preemption Order*, the FCC preempted state regulation of broadband-originated VoIP, and held that all broadband VoIP is exclusively subject to the Commission’s jurisdiction over interstate services. <sup>40/</sup> Jurisdictionally interstate services -- including “mixed use” services, where it is impractical or impossible to separate out interstate from intrastate traffic carried over a shared facility -- are subject to FCC tariffing. <sup>41/</sup> Moreover, jurisdiction is assessed based on the end-to-end nature of the traffic – the physical locations of the facilities, or whether the traffic is carried by a retail or wholesale provider, are irrelevant to the jurisdictional analysis. <sup>42/</sup>

2. Interconnection of VoIP Traffic with the PSTN is Communications. As noted above, even if the Commission concludes that retail broadband VoIP services are “information services” rather than forms of “telecommunications,” it still can and should find that the interconnection functionality provided by a local exchange carrier at the PSTN end of the

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<sup>40/</sup> *Vonage Preemption Order*, ¶ 41.

<sup>41/</sup> *GTE Telephone Operating Cos.*, 13 FCC Rcd 22466 (1998).

<sup>42/</sup> *Id.*; see also *NARUC v. FCC*, 746 F.2d 1492, 1498-99 (D.C. Cir. 1984).

VoIP/PSTN call is a form of “communications.” Specifically, as discussed above, the interconnection of VoIP traffic with the PSTN unambiguously falls within the definition of “wire communications” in the original 1934 Act (47 U.S.C. § 153(52)). 43/

3. Interconnection of VoIP Traffic with the PSTN is Common Carriage. The Act defines “common carrier” in a circular manner, as “any person engaged as a common carrier for hire, in interstate or foreign communication . . . .” 44/ Thus, the Commission and the courts have determined that a “common carrier” is a company that holds its communications services out indiscriminately to the public or some segment of the public, and that the Commission has authority to order companies to offer communications as “common carriage” if the public interest so requires. 45/ For example, when a company possesses bottleneck control of an essential communications facility -- such as critical interconnection facilities -- the Commission can require the company to make the facility available to others as a “common carrier” service. 46/ In this case, the ILEC or CLEC possesses bottleneck control over access to the PSTN end user, so there can be no question that -- to protect VoIP providers and their

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43/ See *supra* note 20.

44/ 47 U.S.C. § 153(10). See also 47 U.S.C. § 153(46) (defining “telecommunications service” as “the offering of telecommunications for a fee directly to the public, or to such classes of users as to be effectively available directly to the public, regardless of the facilities used.”). The Commission has held, and the courts have affirmed, that “telecommunications service” is synonymous with “common carriage.” *Cable & Wireless, PLC*, Order, 12 FCC Rcd 8516, 8521, ¶ 13 (1997); see also *Virgin Islands Tel. Corp. v. FCC*, 198 F.3d 921, 926-27 (D.C. Cir. 1999).

45/ *NARUC v. FCC*, 525 F.2d 630, 644 n.76 (D.C. Cir. 1976) (*NARUC I*); *Computer & Communications Industry Ass’n v. FCC*, 693 F.2d 198 (D.C. Cir. 1982); *World Communications v. FCC*, 735 F.2d 1465 (D.C. Cir. 1984); *Cable & Wireless*, 12 FCC Rcd 8516, 8521-22 (1997).

46/ Cf. *Expanded Interconnection with Local Telephone Company Facilities*, 7 FCC Rcd 7369, ¶ 162 & notes 364-66 (1992), *rev’d on other grounds sub nom. Bell Atlantic Tel. Cos. v. FCC*, 24 F.3d 1441 (D.C. Cir. 1994).

customers from those carriers' market power -- such terminating interconnection arrangements for broadband VoIP-originated traffic need to be regulated as "common carriage." <sup>47/</sup>

Finally, the Commission can adopt the solution outlined here based on the record gathered in response to the *IP-Enabled NPRM*, without any need for a further Notice of Proposed Rulemaking. The *IP-Enabled NPRM* specifically asks about the compensation arrangements that should apply to VoIP and other IP-enabled services, depending on whether those services are classified as telecommunications or information services. The notice also asks about the authority for imposing such charges. <sup>48/</sup> WilTel's answer is the same regardless of whether IP-enabled services are classified as "information services" or "telecommunications:" identical charges should apply, with uniform rate levels that could be equal to or less than interstate access charge levels, potentially as low as reciprocal compensation rate levels. The NPRM is clearly broad enough to encompass the solution offered here.

**D. The Commission Should Order VoIP providers, LECs and IXC's to Develop Signaling Protocols For Broadband VoIP Traffic, but Mandate Interim Measures While Signaling Protocols Are Being Developed**

WilTel has proposed that VoIP traffic be allowed to ride the same termination facilities that carry non-VoIP traffic. We recognize that this necessarily means that the VoIP traffic must be distinguished from long distance, local exchange, and information services insofar as any of that traffic is charged a different termination rate.

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<sup>47/</sup> Note that the federal tariffs under discussion here, intended to carry out pro-competitive federal policy with respect to a type of interstate traffic that the FCC has held to be separate from "local" traffic, *Vonage Preemption Order*, ¶ 27, can be distinguished from intrastate tariffs arguably intended to thwart federal policy and impose anti-competitive restrictions with regard to a type of traffic (intra-MTA CMRS-to-ILEC calls) that the Commission has clearly held to be subject to the Section 251-252 regime for local traffic. *Cf. Developing a Unified Intercarrier Compensation Regime*, T-Mobile, Western Wireless, and Nextel Petition for Declaratory Ruling Regarding Incumbent LEC Wireless Termination Tariffs, CC Docket No. 01-92.

<sup>48/</sup> *IP-Enabled NPRM*, ¶¶ 61-62.

Level 3 has submitted that a new SS7 parameter could be added to distinguish broadband-originated VoIP traffic. <sup>49/</sup> A new call set-up parameter, such as an expanded Originating Line Information (“OLI”) parameter already embedded in SS7 Initial Address Messages (“IAM”), could be developed to identify VoIP traffic originating from broadband connections. The industry is exploring the use of such protocols, as well as other options, through the Alliance for Telecommunications Industry Solutions (“ATIS”), the telecommunications industry standards-setting body. <sup>50/</sup> ATIS’ processes are slow because they are driven by broad consensus requirements; as a result, those interested in impeding progress can do so. To hasten the ability to recognize Broadband VoIP originated calls and prevent abuse, the Commission should require the industry to implement technical solutions, and should impose and enforce tight deadlines. The Commission should also prohibit the manipulation of call data that results in a false indication of whether a call originated from a Broadband VoIP user.

In the interim, the Commission should require LECs and VoIP providers to use manual processes to determine which calls are Broadband VoIP originated, regardless of the rate level the Commission sets for VoIP traffic. For example, VoIP providers should be able to provide information such as manually-presented OLI, IP addresses, customer identity or other

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<sup>49/</sup> Letter from John T. Nakahata, Counsel for Level 3 Communications, to Marlene Dortch, FCC Secretary, WC Docket No. 03-266 (Sept. 24, 2004).

<sup>50/</sup> ATIS’ Network Interconnection Interoperability Forum (“NIIF”) recently began discussing VoIP-related traffic identification parameters and related issues. See <http://www.atis.org/niif/Docs/niifsumJan05.ppt> (Jan. 27, 2005 report on NIIF activities) at 7; [http://www.atis.org/niif/issues251\\_300.asp](http://www.atis.org/niif/issues251_300.asp) (summarizing issues #259 and #260). Telecommunications Reports Daily recently reported, “The AMA Technical Support Group (AMATSG) has made recommendations to the Alliance for Telecommunications Industry Solutions (ATIS) on possible methods of using the Signaling System 7 protocol to identify calls originating from voice-over-IP services providers. The Billing Committee of ATIS’ Ordering and Billing Forum has decided to define a system for identifying calls that originate in a VoIP network and enter the public switched telephone network through an interface between a VoIP gateway and a traditional telco TDM switching system - a decision that has policy implications, for it presumes that there will be a need for such identification, such as for termination and transport charges to VoIP providers.” *TR Daily*, Feb. 14, 2005.

mechanisms to provide evidence to the LEC that a call actually is Broadband VoIP originated. This information should be auditable by the LEC. <sup>51/</sup>

## **CONCLUSION**

Broadband VoIP is a revolutionary development for consumers of telecommunications services. Eventually the day may come when the PSTN disappears, and all voice services originate and terminate over broadband to all end users. However, by any measure that day is not close at hand. Meanwhile, all VoIP providers depend on LECs to terminate broadband calls over the PSTN to their tens of millions of customers.

This White Paper explains why the LECs' bottleneck control over access to their customers threatens VoIP development and consumer choice. It explains why LEC discrimination is particularly pernicious, and why the Commission must take action now to ensure that all VoIP providers can terminate their traffic to a given LEC at the same rate. This is a familiar problem; the Commission has experience dealing with LEC termination bottlenecks in other contexts. The Commission has a ready framework for action in the form of VoIP termination tariffs. And the Commission has significant flexibility to establish VoIP termination rates based either on proxies drawn from the LEC's own termination rates for non-VoIP services, or some other defined methodology. Again, different proxy methodologies can be used for rural and non-rural LECs, resulting in different rate levels.

But in all events, immediate action is needed now. The development of VoIP is suffering from grave uncertainty and *de facto* discrimination. FCC action is long overdue. The Commission should establish interim rules for the termination of VoIP, and require LECs (both

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<sup>51/</sup> Adoption of these solutions would enable all parties -- including rural ILECs -- to accurately identify and apply appropriate tariffed rates to VoIP-to-PSTN traffic. Accordingly, these resources should equally address the concerns about this issue that have been expressed by certain ILECs.



ILECs and CLECs) to tariff their VoIP termination services within 30 days thereafter. These interim rules should remain in place pending further action on long-term intercarrier compensation reform. By taking this narrow but vital step, the Commission will immediately unleash the full potential of unregulated VoIP, and ensure a competitive market for this innovative service.